

WHAT IS CLAIMED IS:

1 1. An implantable sensor apparatus for taking readings from a patient in vivo, the
2 sensor apparatus comprising:
3 an implantable sensor having a distal end with a sensor tip for direct contact with patient
4 fluids;
5 a flush sleeve directed towards the sensor tip; and
6 a fluid conduit in fluid communication with the flush sleeve, wherein a fluid received in
7 the fluid conduit in fluid communication with the flush sleeve is used to spray the sensor tip.

1 2. The sensor apparatus of claim 1, further comprising a connector fitting for
2 supporting the implantable sensor within the patient.

1 3. The sensor apparatus of claim 1, wherein the fluid conduit contains a septum, and
2 wherein a needle is used to pierce the septum to inject the fluid into the fluid conduit.

1 4. The sensor apparatus of claim 1, wherein the flush sleeve surrounds the
2 implantable sensor in a tight fit connection.

1 5. The sensor apparatus of claim 4, wherein the flush sleeve contains at least one
2 one-way valve near the sensor tip.

1 6. The sensor apparatus of claim 1, wherein the fluid conduit is located at a proximal
2 end of the sensor.

1 7. The sensor apparatus of claim 6, wherein the proximal end of the sensor is
2 covered by a protector sleeve.

1 8. The sensor apparatus of claim 1, wherein the sensor is plugged into the connector
2 fitting, and the connector fitting is affixed internally to the patient.

1 9. The sensor apparatus of claim 1, wherein the fluid is a saline solution.

1 10. The sensor apparatus of claim 1, wherein the fluid contains an anti-coagulant.

1 11. The sensor apparatus of claim 1, wherein the connector fitting is connected to a
2 telemetry unit to transmit readings from the implantable sensor.

1 12. A method of cleaning a sensor tip of an implantable electrode sensor having the
2 sensor tip in direct contact with patient fluid, the method comprising the steps of:
3 injecting fluid into a first end of a flush sleeve surrounding the sensor; and
4 spraying off the sensor tip with the injected fluid through at least one orifice located at a
5 second end of the flush sleeve.

1 13. The method of claim 12, wherein the first end of the flush sleeve contains a fluid
2 conduit and a septum, and wherein a needle is used to pierce the septum to inject the fluid into
3 the fluid conduit.

1 14. The method of claim 12, wherein the flush sleeve surrounds the implantable
2 sensor in a tight fit connection.

1 15. The method of claim 14, wherein the flush sleeve contains at least one one-way
2 valve near the sensor tip.

1 16. The method of claim 14, wherein the portion of the sensor in contact with the first
2 end of the flush sleeve is covered by a protector sleeve.

1 17. The method of claim 12, wherein the sensor is plugged into a connector fitting,
2 and the connector fitting is affixed internally to the patient.

1 18. The method of claim 11, wherein the fluid is a saline solution.

1 19. The method of claim 11, wherein the fluid contains an anti-coagulant.

1 20. A system for cleaning a sensor tip of an implantable electrode sensor having the
2 sensor tip in direct contact with patient fluid, the system comprising:

3 means for injecting fluid into a first end of a flush sleeve surrounding the sensor; and

4 means for spraying off the sensor tip with the injected fluid through at least one orifice
5 located at a second end of the flush sleeve.